

What is Claimed is:

1. A method for manufacturing a semiconductor device comprising:

the first step of forming a semiconductor film;
the second step of removing contaminant impurities on a surface of said semiconductor film; and
the third step of forming a gate insulating film in contact with said semiconductor film after said second step,
wherein said second and third steps are performed in sequence without being exposed to the atmosphere.

2. A method for manufacturing a semiconductor device comprising:

the first step of forming an amorphous semiconductor film;
the second step of forming a crystalline semiconductor film by crystallizing said amorphous semiconductor film;
the third step of forming an island-shaped crystalline semiconductor layer by patterning said crystalline semiconductor film;
the fourth step of removing contaminant impurities on a surface of said crystalline semiconductor layer; and
the fifth step of forming a gate insulating film in contact with said crystalline semiconductor layer after said fourth step,
wherein said fourth and fifth steps are performed in sequence without being exposed to the atmosphere.

3. A method for manufacturing a semiconductor device comprising:

the first step of forming a base film;
the second step of removing contaminant impurities on a surface of said base film; and
the third step of forming a semiconductor film in contact with said base film after said second step,
wherein said second and third steps are performed in sequence without being exposed to the atmosphere.

4. A method for manufacturing a semiconductor device comprising:
a step of forming a gate insulating film;
a step of removing contaminant impurities on a surface of said gate insulating film; and
a step of forming a gate conductive film in contact with said gate insulating film after said contaminant impurities are removed,
wherein said step of removing said contaminant impurities and said step of forming said gate conductive film are performed in sequence without being exposed to the atmosphere.

5. A method for manufacturing a semiconductor device according to claim 1, wherein said surface is etched with an acid solution which includes fluorine in said second step.

6. A method for a semiconductor device according to claim 1, wherein said surface is etched with an acid solution which includes fluorine after washing with pure water in which ozone is dissolved in said second step.

7. A method for manufacturing a semiconductor device according to claim 2, wherein said surface is etched with an acid solution which includes fluorine in said forth step.

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8. A method for a semiconductor device according to claim 2, wherein said surface is etched with an acid solution which includes fluorine after washing with pure water in which ozone is dissolved in said forth step.

9. A method for manufacturing a semiconductor device according to claim 3, wherein said surface is etched with an acid solution which includes fluorine in said second step.

10. A method for a semiconductor device according to claim 3, wherein said surface is etched with an acid solution which includes fluorine after washing with pure water in which ozone is dissolved in said second step.

11. A method for manufacturing a semiconductor device according to claim 4, wherein said surface is etched with an acid solution which includes fluorine in said second step.

12. A method for a semiconductor device according to claim 4, wherein said surface is etched with an acid solution which includes fluorine after washing with pure water in which ozone is dissolved in said second step.